ON THE

REDISCOVERY OF EUSELENOPS [=NEDA] LUNICEPS (Cov.). By S. Pace, F.Z.S., etc.

Read 11th January, 1901.

The genus Neda was founded (October, 1854) by the brothers Adams, for the reception of a remarkable pelagic Tectibranch which Cuvier had previously (1817) named Pleurobranchus luniceps. Although Cuvier published a figure of the species, he gave no diagnosis of its characters, neither did he mention whence his specimen (evidently a spirit one) had been derived. In all probability, however, it had been collected by Péron and Lesueur; and it was probably the same specimen which was afterwards (1826) described by De Blainville. The species was evidently rediscovered by the "Samarang," since coloured figures by A. Adams of the living animal were included in the account of the Zoology of the voyage; but, again, nothing was said as to the occurrence of the form, and the specimen, if it were preserved, cannot now be traced.

Pilsbry in 1896 pointed out that the name Neda was preoccupied, it having been employed by Mulsant for a genus of Coleoptera, and he therefore proposed to rename the Molluscan group Euselenops. Pilsbry regarded Euselenops as a subgenus of Pleurobranchæa, but I think that

it will prove entitled to at least generic rank.

Among the Opisthobranchs collected by Semper in the Philippines was a single example of one which Bergh regarded as being identical with the type of Adams' genus Neda, and as probably the same as Cuvier's Pleurobranchus luniceps. Bergh made no reference to Pilsbry's work; and he established (December, 1897) the new genus Oscaniopsis for Semper's specimen, renaming the species O. Semperi. Whether Oscaniopsis Semperi really is the same as the species figured

¹ Genera, vol. ii, p. 40. Neda was described as a genus of Pleurobranchinæ.

⁴ Diet. Sci. Nat., vol. xli, p. 371.

⁶ Adams & Reeve: Zool. Voy. Samarang (Mollusca), p. 66, pl. xviii, fig. 6.

² Règne Auimal, vol. ii, p. 396, footnote; vol. iv, pl. xi, fig. 2. As first pointed out by De Blainville, Cuvier's figure has obviously been reversed by the engraver, the gill appearing on the left side of the animal.

³ Bergh in the course of his description of Semper's Pleurobranchidæ states (footnote to p. 7) that Vayssière has examined Cuvier's specimen, and that it is said to come from Mauritius.

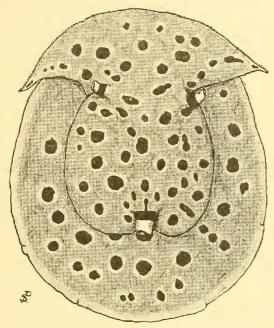
⁵ The "Samarang" figure was incorrectly copied on pl. lxi of Adams' "Genera"; an anal siphon, distinct from the tubular fold of the mantle, having been inserted by the engraver.

⁷ Tryon's Man. Conch., ser. 1, vol. xvi, p. 228.

⁸ In Semper: Reisen im Archipel. Philipp., pp. 54-57, pl. vi, figs. 11-31.

by Adams and Reeve is, I think, rather doubtful: Bergh's description and figures of Semper's shrivelled-up spirit specimen hardly tally with those published of the (living) "Samarang" one. A comparison of the internal anatomy will however decide the question; and this comparison will now be possible, since I have recently been fortunate enough, while collecting in Torres Straits, to meet with what is undoubtedly an example of *Euselenops*.

On board the schooner "Dayspring," moored in Friday Island Passage, one of my boys on a certain afternoon directed my attention to a peculiar 'fish' which was swimming vigorously alongside the ship. By the aid of a draw-bucket we succeeded in capturing the



Euselenops luniceps (Cuv.).

Drawn from life about the natural size.

strange object, which proved to be a specimen of Euselenops. I was fortunately able to keep the animal alive in a tub of water on board for some days, and thus had a good opportunity for observing its habits. While in confinement it was very active: spending most of the time (night as well as day) in creeping rapidly round and round the bottom of the tub, and every now and then swimming about wildly for some few minutes, with a curious undulating motion something like that of a pleuronectid fish. While swimming it would often turn a complete somersault. When at rest the body became much flattened out, and even the excurrent siphon would then occasionally be obliterated, but

more usually the latter continued in active operation; and if the animal were only just covered by the water a stream would then be projected for an inch or more into the air. I never observed the proboscis to be everted during life, though at death it was protruded; and the ctenidium was never extended beyond the mantle in the manner shown in Cuvier's figure. The crescentic head-shield was evidently very sensitive, more especially its terminal horns: it was usually carried a little in advance of the body and the villi clothing its under surface were in continual motion. The general colour effect of the upper surface of the animal was that of a pale lilac-brown ground with large and conspicuous black blotches scattered upon it. Examined more carefully, a considerable difference became noticeable between the ground colour of the noteum and head-shield, and that of the dorsal surface of the foot: the former region being almost yellowish and the spots scattered over it of a deep brown, the latter lilac with purple-black spots. In each case the ground colour shaded off so as to form a well-marked paler zone surrounding each of the maculations. These latter were very variable in form and size; with irregularly rounded outlines, but having their margins perfectly well defined. A narrow, colourless, and transparent zone extended along the thin edge of the foot. The sole of the foot, which was distinctly tripartite, was of a reddish violet colour, paler towards the centre, but very dark at the edge and posteriorly. The under surface of the head reddish brown with a white margin; the villi colourless. The lower surface of the mantle colourless. A broad black band encircled each of the rhinophores and the excurrent siphon: beyond this terminally they were an opaque-white.

During a stay of nearly three years in the Straits I saw but the single specimen here recorded; and none of the natives employed in the Pearl-fisheries who saw the animal during life, or to whom I showed drawings of it, had apparently ever met with it. *Euselenops* cannot therefore be at all a common form in this region, and my specimen was possibly only a wanderer from the Indian Ocean.

Adams & Reeve state that the siphonal inflection of the mantle "guides the water into the marginal groove between the dilated foot and mantle"; it, of course, is really excurrent in function.